roadstar
AUDIO-VIDEO

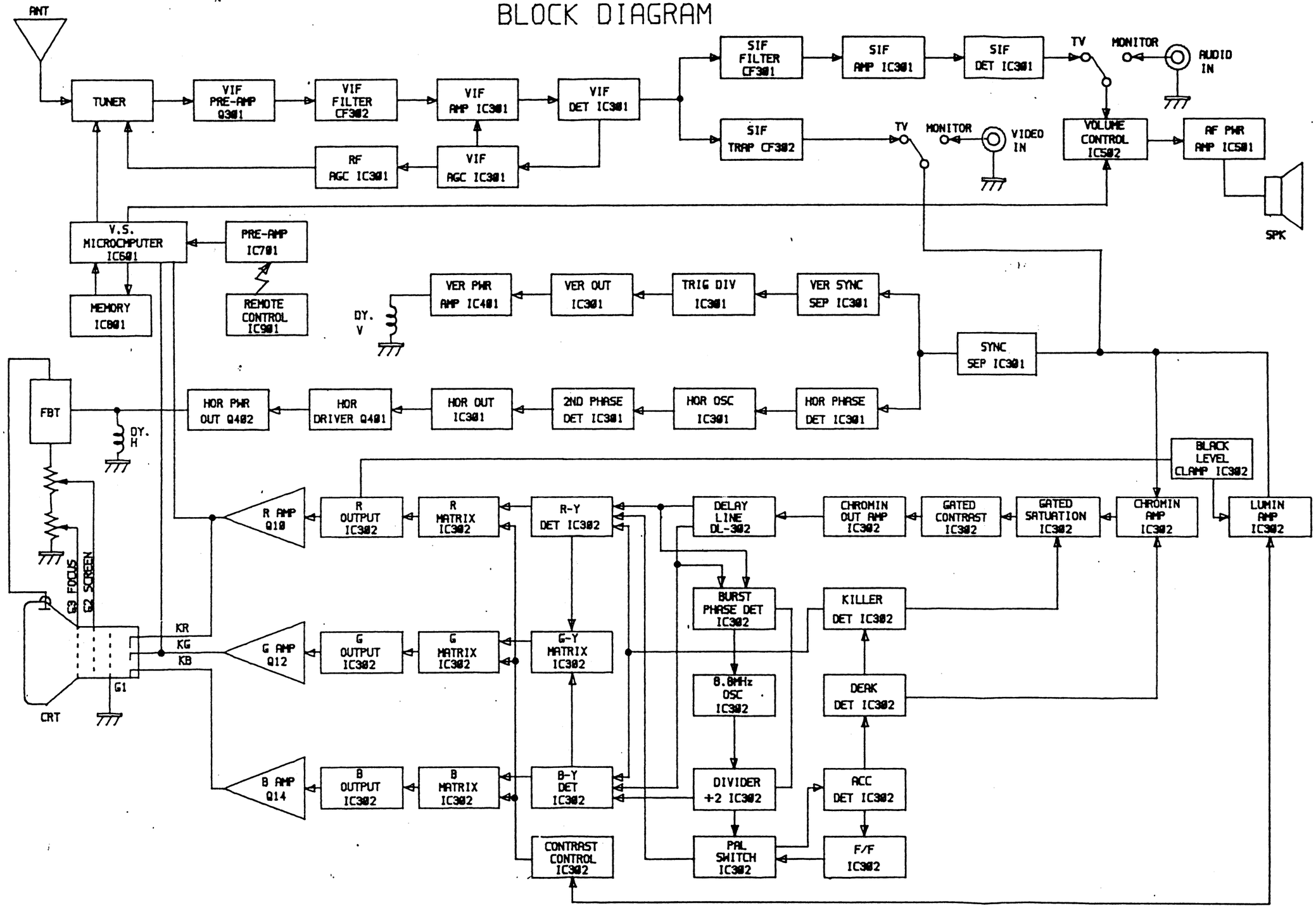
Service Manual

CTV-550

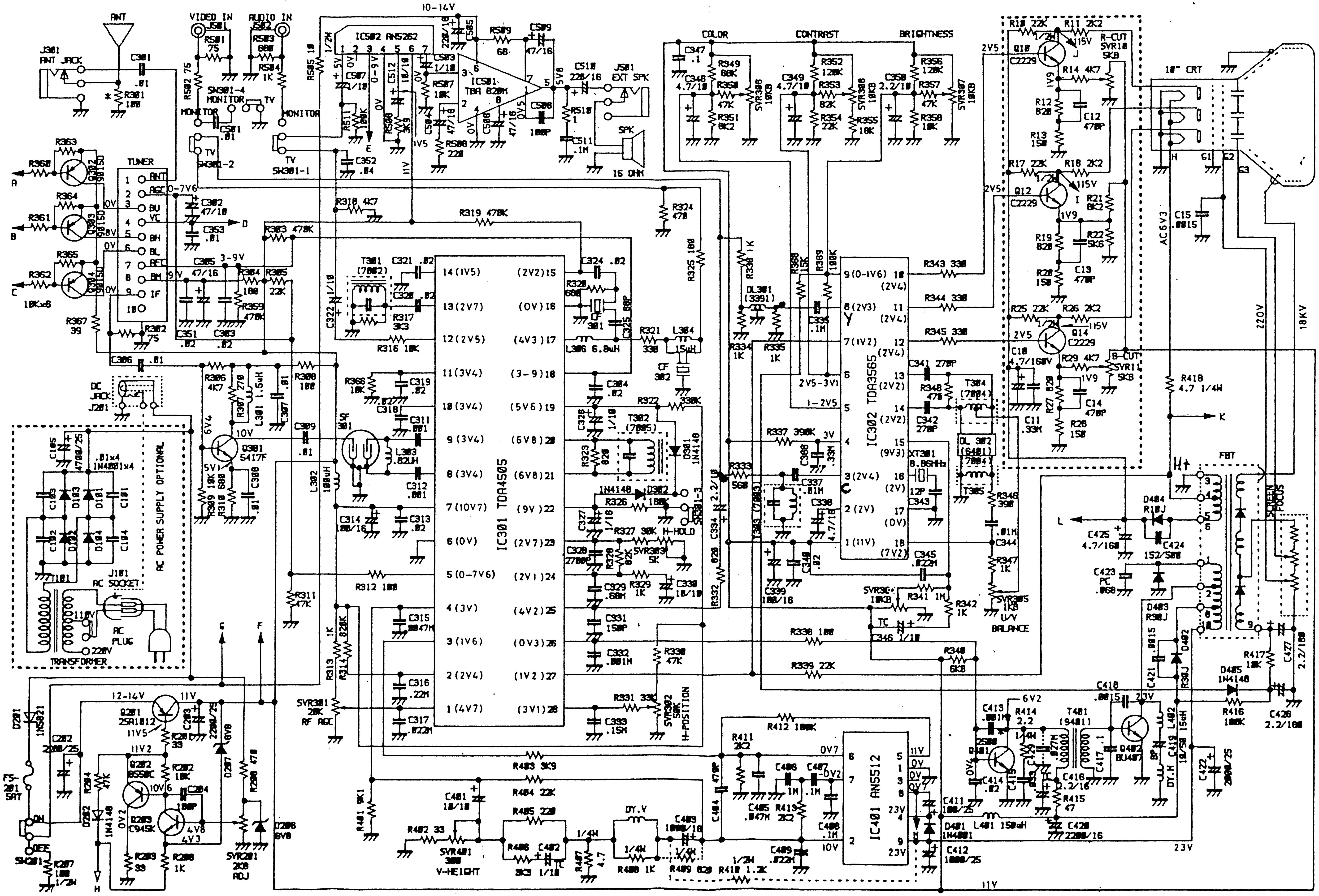
10 INCH (25CM) COLOUR PORTABLE TV/MONITOR WITH REMOTE CONTROL-PAL B/G SYSTEM

BLOCK DIAGRAM OF CTV 550/CTV 550 (I)

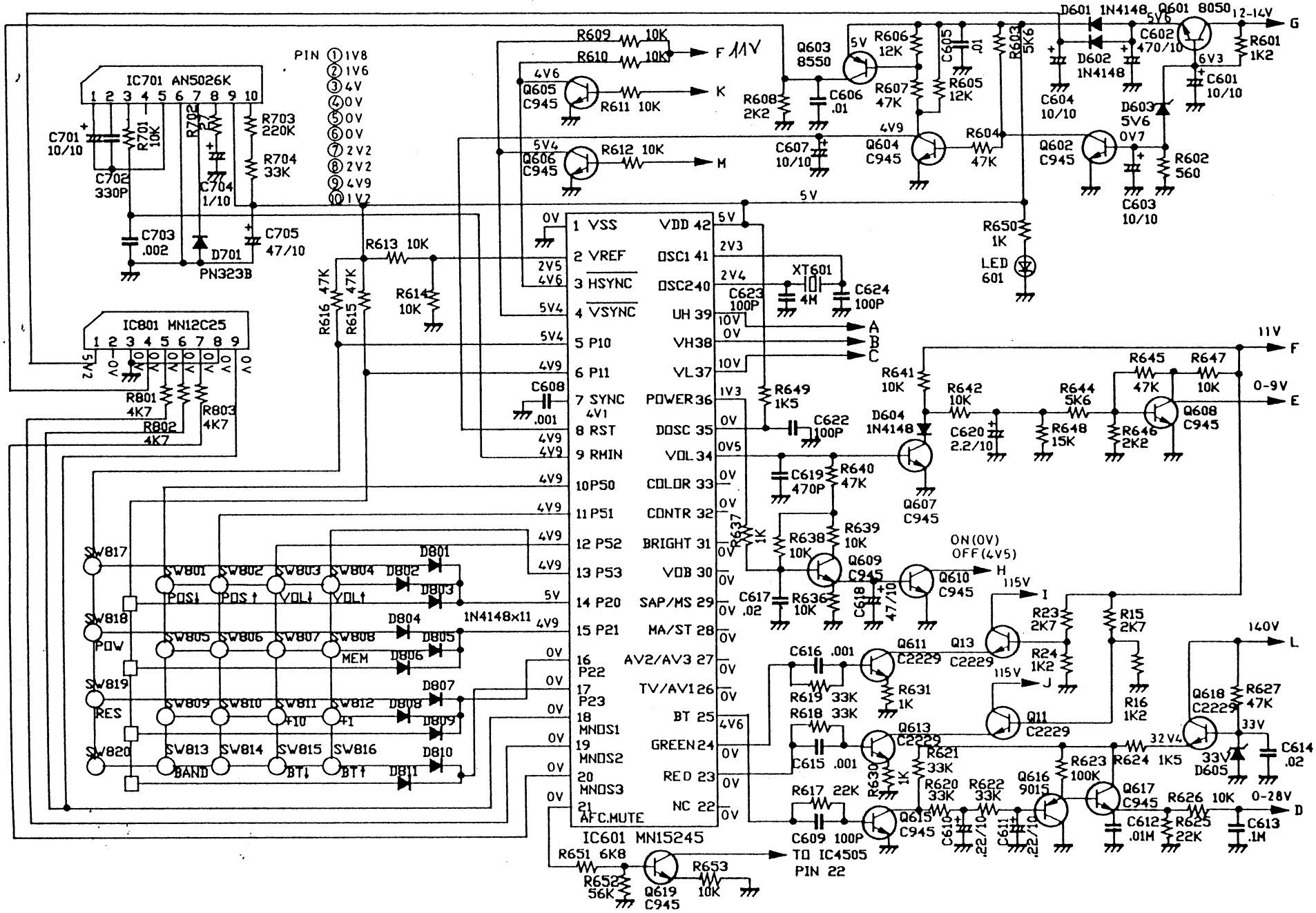
BLOCK DIAGRAM



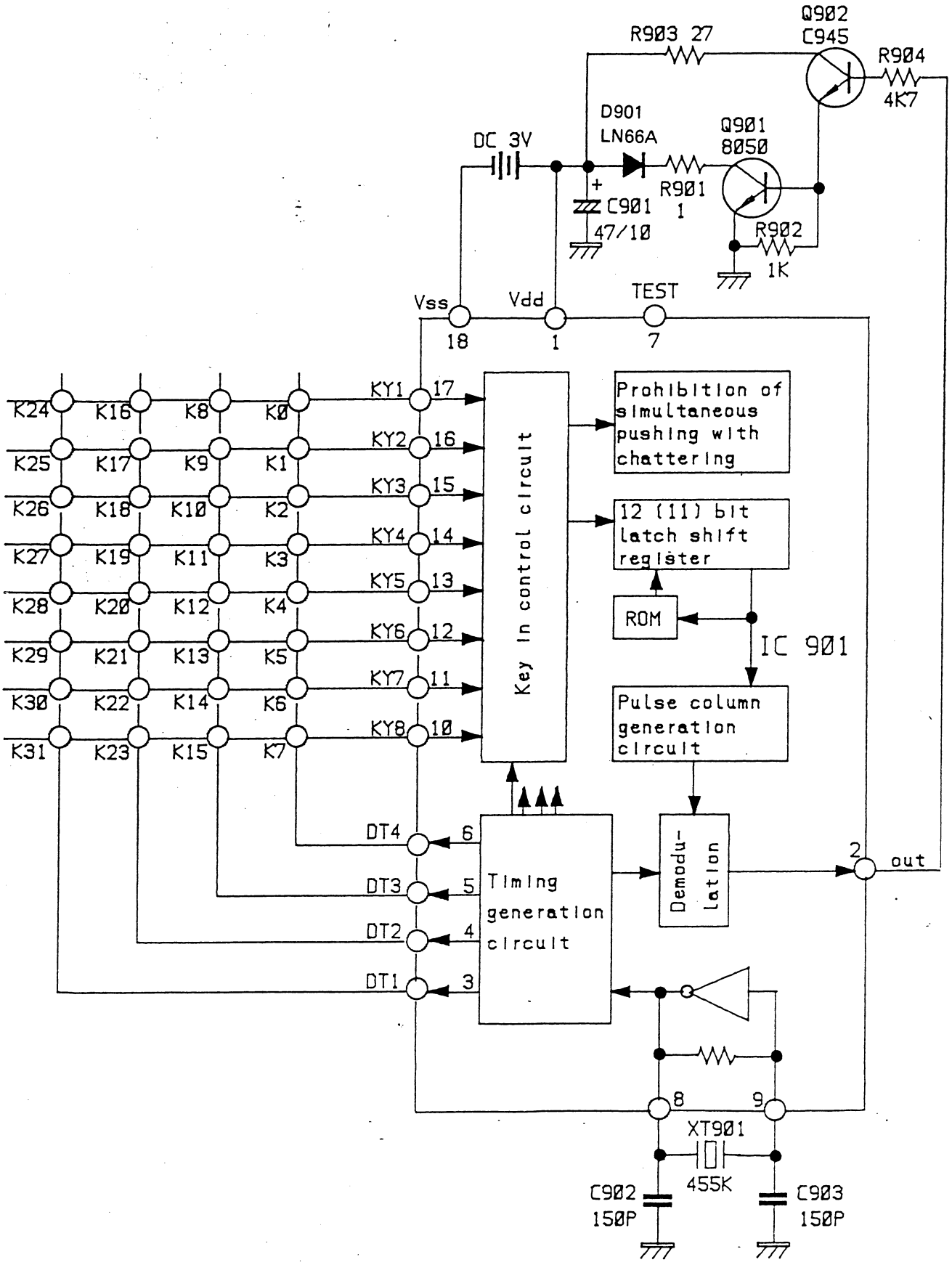
TV SCHEMATIC DIAGRAM OF CTV 550 /CTV 550 (I)


ANT
J301 ANT JACK
C301 .01
R301 100
VIDEO IN J501
AUDIO IN J502
R501 75
R503 680
R504 1K
R502 75
SW301-4 MONITOR
TV
MONITOR
C501 .01
SW301-2
SW301-1
R505 10 1/2W
IC502 AN5262
C507 1/10
R511 100K
C512 10/10
R506 3K9
E
C352 .04
10-14V
C583 1/10
R507 10K
C504 47/10
R508 220
C505 220/10
R509 68
C509 47/16
IC501 TBA 820M
C506 47/16
C508 100P
C510 220/16
J501 EXT SPK
R510 1
C511 .1M
SPK
16 OHM
COLOR
CONTRAST
BRIGHTNESS
C347 .1
R349 68K
C348 4.7/10
R350 47K
R351 8K2
SVR308 10KB
C349 4.7/10
R352 120K
R353 82K
R354 22K
R355 10K
SVR309 10KB
C350 2.2/10
R356 120K
R357 47K
R358 10K
SVR307 10KB
R10 22K
R11 2K2
Q10 C2229
R-CUT SVR10 5KB
R14 4K7
R12 820
C12 470P
R13 150
R17 22K
R18 2K2
Q12 C2229
R21 8K2
R19 820
R22 5K6
R20 150
C13 470P
R25 22K
R26 2K2
Q14 C2229
C10 4.7/160V
R29 4K7
B-CUT SVR11 5KB
R27 820
C14 470P
R28 150
C11 .33M
10" CRT
H
G1
G2
G3
C15 .0015
AC6V3
220V
18KV
R418 4.7 1/4W
K
TUNER
R363
R360
Q302 9015D
A
R364
R361
Q303 9015D
B
R365
R362
Q304 9015D
C
10Kx6
R367 39
R302 75
C302 47/10
C353 .01
D
C305 47/16
3-9V
R304 100
R305 22K
R359 470K
C351 .02
C303 .02
R303 470K
R318 4K7
R319 470K
C306 .01
DC JACK J201
R306 4K7
R307 270
L301 1.5uH
C307 .01
R308 100
Q301 5417F
R309 10K
R310 680
C308 .01
C309 .01
T301 (7002)
C321 .02
C320 .02
R317 3K3
C322 1/10
R316 10K
R366 10K
C319 .02
C318 .02
C311 .001
SF 301
L303 .82UH
L302 100uH
C312 .001
C314 100/16
C313 .02
R312 100
R311 47K
R313 1K
R314 820K
C315 .0047M
C316 .22M
C317 .022M
SVR301 20K RF AGC
IC301 TDA4505
C324 .02
R320 680
CF 301
C325 68P
R321 330
L304 15uH
L306 6.8uH
CF 302
R325 100
R324 470
C304 .02
R322 330K
C328 1/10
T302 (7005)
D301 1N4148
R323 820
1N4148 D302
R326 100K
SW301-3
C327 1/10
R327 30K
H-HOLD
SVR303 5K
C328 2700P
R328 82K
R329 1K
C330 10/10
C329 .68M
C331 150P
C332 .001M
R330 47K
R331 33K
SVR302 50K H-POSITION
C333 .15M
R332 820
C334 2.2/10
R338 1K
DL301 (3391)
R334 1K
R335 1K
R368 15K
R369 100K
C335 .1M
IC302 TDA3565
R343 330
R344 330
R345 330
C341 270P
R348 470
T304 (7004)
C342 270P
DL 302 (6401)
R337 390K
C300 .33M
R333 560
C337 .01M
T303 (7003)
C338 4.7/10
XT301 8.86MHz
12P C343
T305
R346 390
.01M C344
C339 100/16
C340 .02
C345 .022M
SVR306 10KB
R341 1M
R342 1K
R347 1K
SVR305 1KB U/V BALANCE
TC
C346 1/10
R336 100
R339 22K
R340 6K8
C105 4700/25
.01x4 1N4001x4
C103 D103 D101 C101
C102 D102 D104 C104
T101
J101 AC SOCKET
AC POWER SUPPLY OPTIONAL
110V
AC PLUG
220V
TRANSFORMER
G
F
D201 1N5821
C202 2200/25
FS-201 5AT
ON
OFF
SW201
R207 100 1/2W
12-14V
11V
Q201 2SA1012
11V5
C203 2200/25
R201 39
D207 6V8
11V2
Q202 8550C
R202 10K
R204 47K
D202 1N4148
Q203 C945K
C204 100P
R203 39
R206 1K
H
R208 470
SVR201 2KB ADJ
D208 6V8
R412 100K
R411 2K2
R403 3K9
R404 22K
R405 220
R401 9K1
C401 10/10
R402 33
SVR401 300 V-HEIGHT
R406 3K3
C402 1/10
R407 4.7
DY.V
R408 1K
C403 1000/16
R409 820
R410 1.2K
C404 470P
C406 1M
C407 .1M
C405 .047M
R413 2K2
C408 .1M
C409 .022M
IC401 AN5512
C411 100/25
D401 1N4001
C412 1000/25
L401 150uH
C420 2200/16
23V
11V
C413 .001M
R414 2.2
Q401 2500
C414 .02
C415
R415 47
C416 2.2/16
T401 (9401)
C417 .1
Q402 BU407
C418 .0015
L402 15uH
C419 10/50
DY.H
C422 2000/25
FBT
D404 R10J
L
C425 4.7/160
C424 152/500
C423 PC .068
D403 R30J
C421 .0015
D402 R30J
D405 1N4148
R417 10K
R416 100K
C427 2.2/160
C426 2.2/160
SCREEN
FOCUS

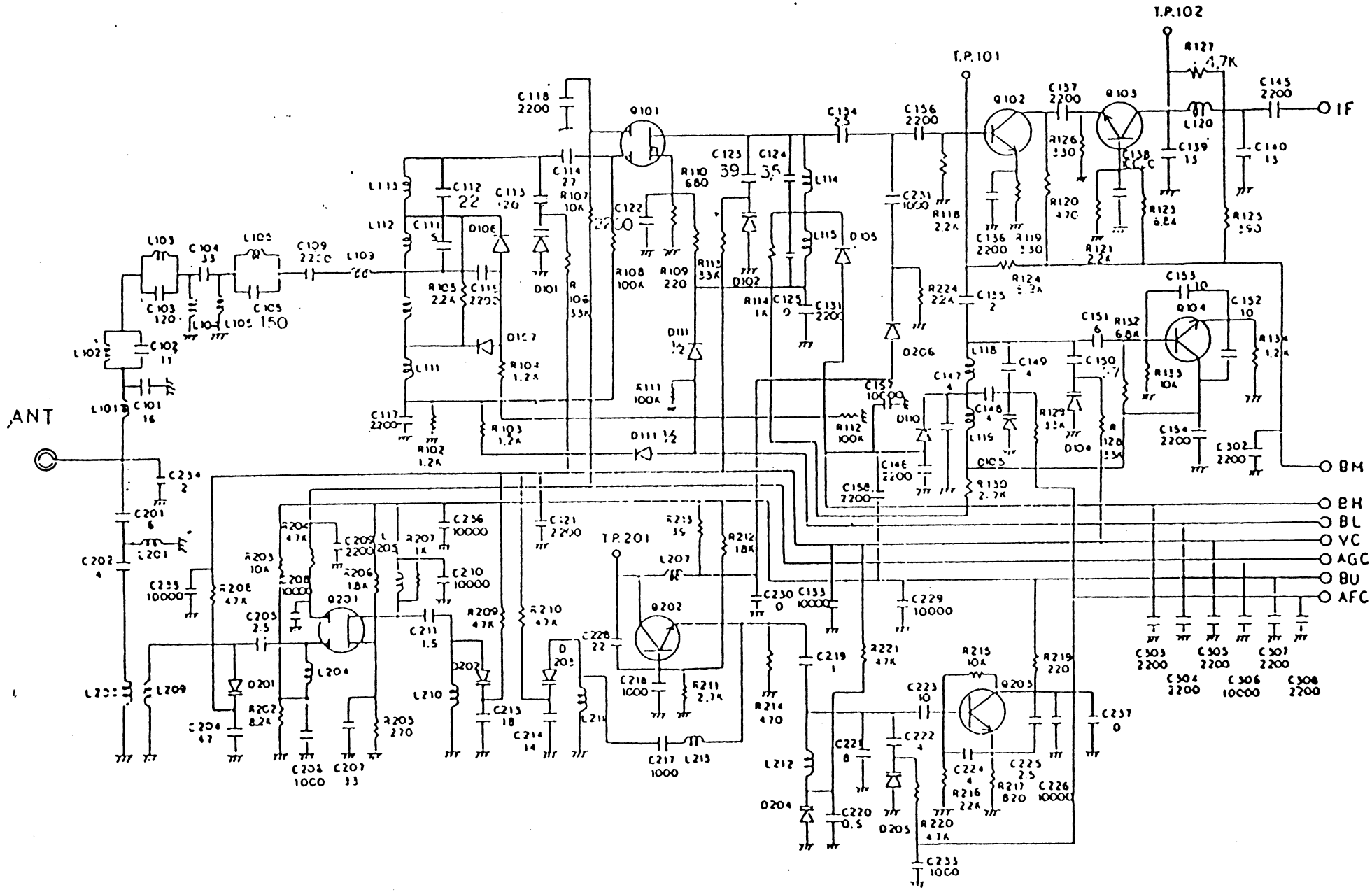
TV SCHEMATIC DIAGRAM OF CTV 550 /CTV 550 (I)



REMOTE CONTROL SCHEMATIC DIAGRAM OF CTV 550/CTV 550 (I)



TUNER DIAGRAM OF CTV 550(I)



ELECTRICAL SPECIFICATION OF CTV 550

Output: 50mW Date:_____

Supply Voltage: DC 12V Load: 16 Ohm Tested By:_____

General Information: TV 75 Ohm Input Ant. Side Voltage 0dB = 1μV

	Description	Unit	Spec.	
			Nominal	Limit
TV				
1	Tuning Range VHF Ch. 2–4	MHz	44–70	48–65
	VHF Ch. 5–12	MHz	172–230	175–224
	UHF Ch. 21–69	MHz	468–864	471–855
2	VHF Max. Sensitivity (10Vpp)	dB	30	36
3	UHF Max. Sensitivity (10Vpp)	dB	35	40
4	Picture IF Rejection Ratio Ch. 2–4	dB	50	40
	Ch. 5–12	dB	60	50
	Ch. 21–69	dB	75	70
5	Picture Image Rejection Ratio Ch. 2–4	dB	50	40
	Ch. 5–12	dB	50	40
	Ch. 21–69	dB	40	30
6	Oscillator Drift (Warm Up) Ch. 2–12	KHz	±350	±500
	Ch. 21–69	KHz	±800	±1000
7	Intermediate Frequency Picture	MHz	38.9	
	Sound	MHz	33.4	
8	6dB Bandwidth	MHz	3.5	3.0
9	Adjacent Sound Carrier Suppression	dB	40	30
10	Adjacent Picture Carrier Suppression	dB	40	30
11	Max. Usable Input Signal	dB	85	80
12	Max. Video Output	Vp-p		20
13	Video Resolution Hor. Center	lines	300	260
	Corners	lines		200
	Vert. Center	lines	320	280
	Corners	lines		250
14	Contrast Control Range	dB	6.0	4.0
15	Audio Fidelity (400Hz 0dB) at 125Hz	dB	–1	±6
	at 6KHz	dB	–12	±6
16	Max. Audio Output	W	0.7	0.5

ELECTRICAL SPECIFICATION OF CTV 550

Output: 50mW Date:_____

Supply Voltage: DC 12V Load: 16 Ohm Tested By:_____

General Information: TV 75 Ohm Input Ant. Side Voltage 0dB = 1μV

	Description	Unit	Spec.	
			Nominal	Limit
TV				
17	10% Distortion Audio Output	W	0.6	0.4
18	S/N	dB	35	30
19	AM Suppression Ratio	dB	30	26
20	Hor. Pull-in Range	Hz	±600	±300
21	Vertical Pull-in Range	Hz	-1/-15	-1/-10
22	Hor. Non-linearity	%	15	25
23	Vertical Non-linearity	%	5	10
24	High Voltage (Max.)	kV	18	18±0.8
	(Min.)	kV	16	16±0.8
	(80μA Beam Current)	kV	17.0	17±0.5
25	Geometric Distortion	%	1	2
26	B^+ Filter Output	V	11±0.3	11±0.5
27	Total B^+ DC Current	A	2.6±0.2	2.6±0.3
28	AGC Voltage (60dB Input)	V	6.3±0.3	6.3±0.5
29	X-radiation	MH/H		0.1
30	Power Source	DC 12–14V		
31	Power Consumption DC	W	33	36

REMOTE CONTROL SPECIFICATION

1.	Distance
	Directivity 5M (Min.)
	Vertical and Horizontal
	Direction 30° From Light Axis 3M (Min.)
2.	Transmitter
	Operating Voltage 3V DC
	Operating Current 80mA±20mA
	Peak Current 500mA – 800mA

ELECTRICAL SPECIFICATION OF CTV 550(I)

Output: 50mW Date:_____

Supply Voltage: DC 12V Load: 16 Ohm Tested By:_____

General Information: TV 75 Ohm Input Ant. Side Voltage 0dB = 1μV

	Description	Unit	Spec. Nominal	Spec. Limit
TV				
1	Tuning Range VHF Ch. A–C	MHz	48–88	52–83
	VHF Ch. D–H2	MHz	172–228	175–225
	UHF Ch. 21–69	MHz	468–889	470–886
2	VHF Max. Sensitivity (10Vpp)	dB	30	36
3	UHF Max. Sensitivity (10Vpp)	dB	35	40
4	Picture IF Rejection Ratio Ch. A–C	dB	50	40
	Ch. D–H2	dB	60	50
	Ch. 21–69	dB	75	70
5	Picture Image Rejection Ratio Ch. A–C	dB	50	40
	Ch. D–H2	dB	50	40
	Ch. 21–69	dB	40	30
6	Oscillator Drift (Warm Up) Ch. A–H2	KHz	±350	±500
	Ch. 21–69	KHz	±800	±1000
7	Intermediate Frequency Picture	MHz	38.9	
	Sound	MHz	33.4	
8	6dB Bandwidth	MHz	3.5	3.0
9	Adjacent Sound Carrier Suppression	dB	40	30
10	Adjacent Picture Carrier Suppression	dB	40	30
11	Max. Usable Input Signal	dB	85	80
12	Max. Video Output	Vp-p		20
13	Video Resolution Hor. Center	lines	300	260
	Corners	lines		200
	Vert. Center	lines	320	280
	Corners	lines		250
14	Contrast Control Range	dB	6.0	4.0
15	Audio Fidelity (400Hz 0dB) at 125Hz	dB	−1	±6
	at 6KHz	dB	−12	±6
16	Max. Audio Output	W	0.7	0.5

ELECTRICAL SPECIFICATION OF CTV 550 (I)

Output: 50mW Date:_____

Supply Voltage: DC 12V Load: 16 Ohm Tested By:_____

General Information: TV 75 Ohm Input Ant. Side Voltage 0dB = 1μV

	Description	Unit	Spec. Nominal	Spec. Limit
TV				
17	10% Distortion Audio Output	W	0.6	0.4
18	S/N	dB	35	30
19	AM Suppression Ratio	dB	30	26
20	Hor. Pull-in Range	Hz	±600	±300
21	Vertical Pull-in Range	Hz	-1/-15	-1/-10
22	Hor. Non-linearity	%	15	25
23	Vertical Non-linearity	%	5	10
24	High Voltage (Max.)	kV	18	18±0.8
	(Min.)	kV	16	16±0.8
	(80μ A Beam Current)	kV	17	17±0.5
25	Geometric Distortion	%	1	2
26	B^+ Filter Output	V	11±0.3	11±0.5
27	Total B^+ DC Current	A	2.6±0.2	2.6±0.3
28	AGC Voltage (60dB Input)	V	6.3±0.3	6.3±0.5
29	X-radiation	MH/H		0.1
30	Power Source	DC 12–14V		
31	Power Consumption DC	W	33	36

REMOTE CONTROL SPECIFICATION

1.	Distance
	Directivity 5M (Min.)
	Vertical and Horizontal
	Direction 30° From Light Axis 3M (Min.)
2.	Transmitter
	Operating Voltage 3V DC
	Operating Current 80mA± 20mA
	Peak Current 500mA – 800mA

REGULATOR ADJUSTMENT

1. Connect TV to DC 12V-14V.
2. Adjust vertical and horizontal oscillator controls until display is synced.
3. Connect a DC digital voltmeter or other precision accuracy voltmeter to the collector of the regulator output transistor (or any 11 volt point or TP10.

HOROZPNTAL OSCILLATOR ADJUSTMENT

Adjust horizontal hold SVR303 until the picture hold in sync.

1. POWER ADJUSTMENT
   Adjust the power adjust SVR201, enable voltmeter to DC 11V
2. VERTICAL HIGHTNESS ALIGNMENT
   Adjust the vertical hightness SVR401 enable the circle of picture approach to circle.
3. HORIZONTAL POSITION ALIGNMENT
   Adjust horizontal position SVR302, let the square signal in the center of the screen.
4. RF AGC ALIGNMENT
   Adjust RF AGC SVR301 at input signal intensity 60dB, the screen could looking clear and 80dB the screen don't inflect.
5. WHITE BALANCE ALIGNMENT
   Adjust the SVR10, SVR11, at center position. Adjust screen VR401 let the screen will be little brightness. Adjust SVR 10 let the screen to be yellow, and then adjust SVR11 let the screen approach to white.
6. FOCUS ADJUSTMENT
   Adjust VR402 let the strip in the screen to be clear.
7. SCREEN ADJUSTMENT
   Adjust VR401 let the brightness suit as desired.

CANCEL VENETAIN BLINED ALIGNMENT

- Set TV/Monitor switch at monitor.
- The video signal of demodulation pattern send to video in jack.
- The demondulation pattern on screen is from left side to right side, bar 2, bar 3, bar 4 sequently on up side.

1) Mistuned T304 to top.
2) Cancel venetain blind on bar 3 by SVR305.
3) Cancel venetain blind on bar 1 and bar 4 by T305.
4) Cancel venetain blind on bar 2 by SVR304.
5) Switch generator to color bar, adjust T304 for minimum venetain blind on purple area.

GENERAL ALIGNMENT INSTRUCTIONS

1. VIDEO IF ALIGNMENT
   TEST EQUIPMENT CONNECTION (See figure)

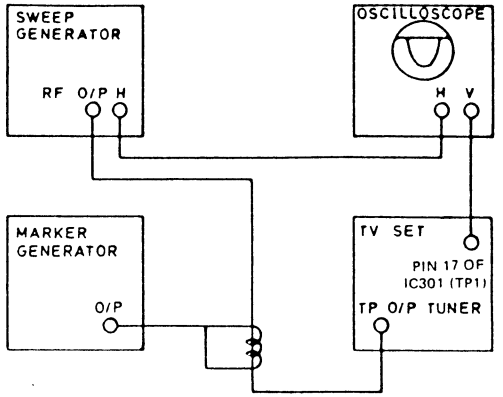
OSCILLOSCOPE: Connect to the base of IC301 PIN17. (TP1)

SWEEP GENERATOR: Connect through a MATCHING PAD to the test point (T.P) of the tuner.

MARKER GENERATOR: Couple loosely to the output cable of sweep generator.

DC SUPPLIES: Connect a SVR 1M OHM between IC301 PIN 19 and ground. (TP2)
Add DC + 12V at DC Jack.

Adjust Sweep Generator to lowest signal level consistent with usable			
Step	Sweep Frequency	Marker Frequency	Remark
Adjust VIF Detector T302 for marker point maximum	25-45 MHz (45-65MHz for Japan). 30-50 MHz for CCIR.	System B,C.G,H 36.7MHz System I 37.3MHz System M, N 44MHz (57MHz for Japan) (34.7MHz for Austraria system)	In the parenthesis for exception.



VIDEO IF ALIGNMENT CONNECTING FIGURE

2. SOUND IF ALIGNMENT
   TEST EQUIPMENT CONNECTION

SIGNAL GENERATOR: Connect to the IC302 PIN 17 through a MATCHING PAD. (TP1)

OSCILLOSCOPE: Connect to the PIN 12 of IC301. (TP3)

CTV 550
CTV 550(I)

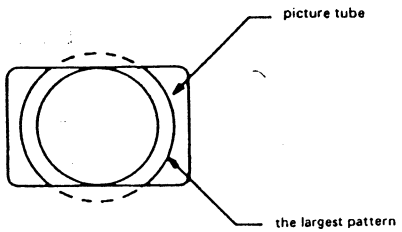
ALIGNMENT PROCEDURE

STEP	GENERATOR	SCOPE	ADJUST	REMARKS
Adjust Sound Detection Coil.	System B,C,G,H 5.5MHz, System M,N 4.5MHz, System I 6MHz, System D,K,K1 6.5MHz, 1kHz FM MOD Deviation 25kHz 80dB Output.	Connect to the pin 12 of IC301 (TP3)	T301	Adjust T301 so the signal of 1kHz in scope may be max.

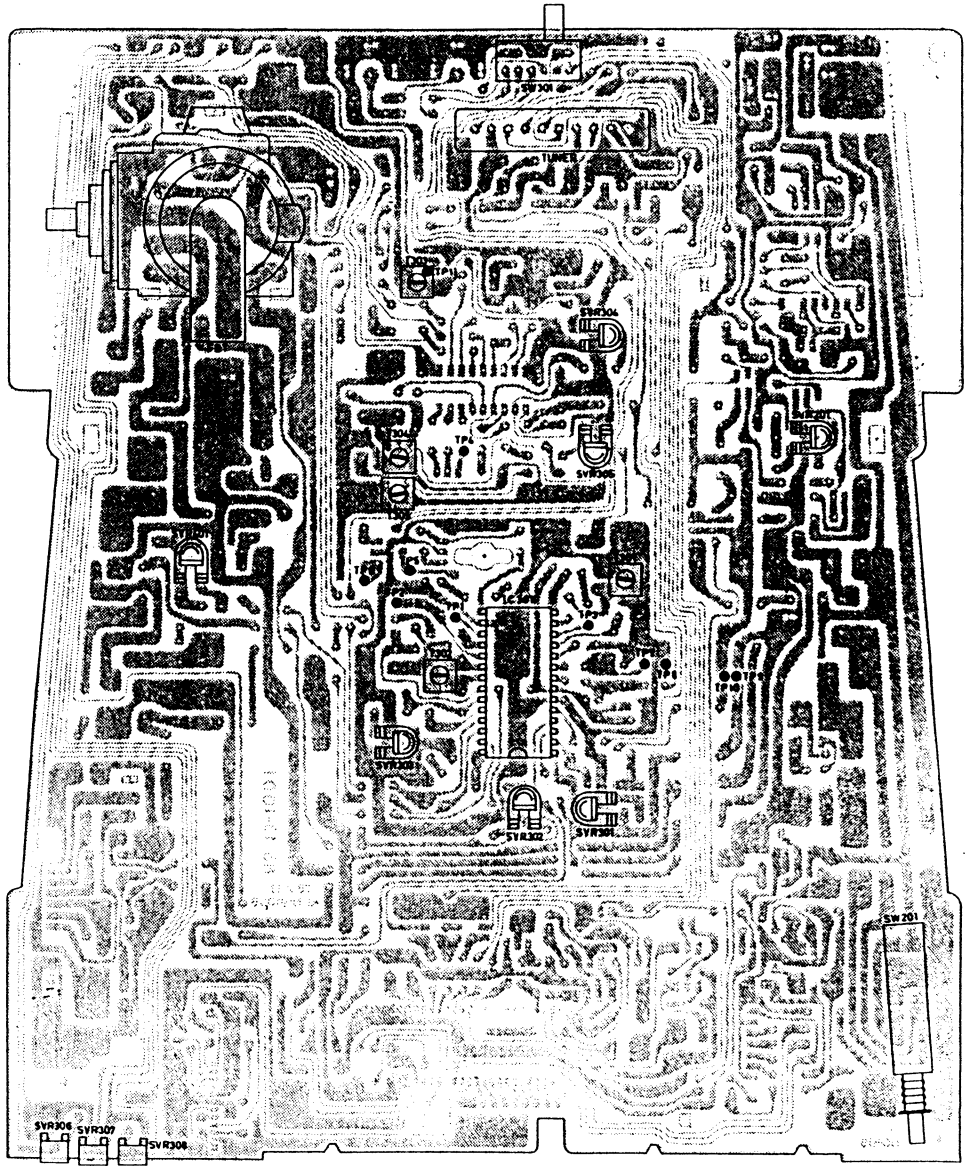
VERTICAL DEFLECTION ALIGNMENT

(1) Tune the receiver in a test pattern.

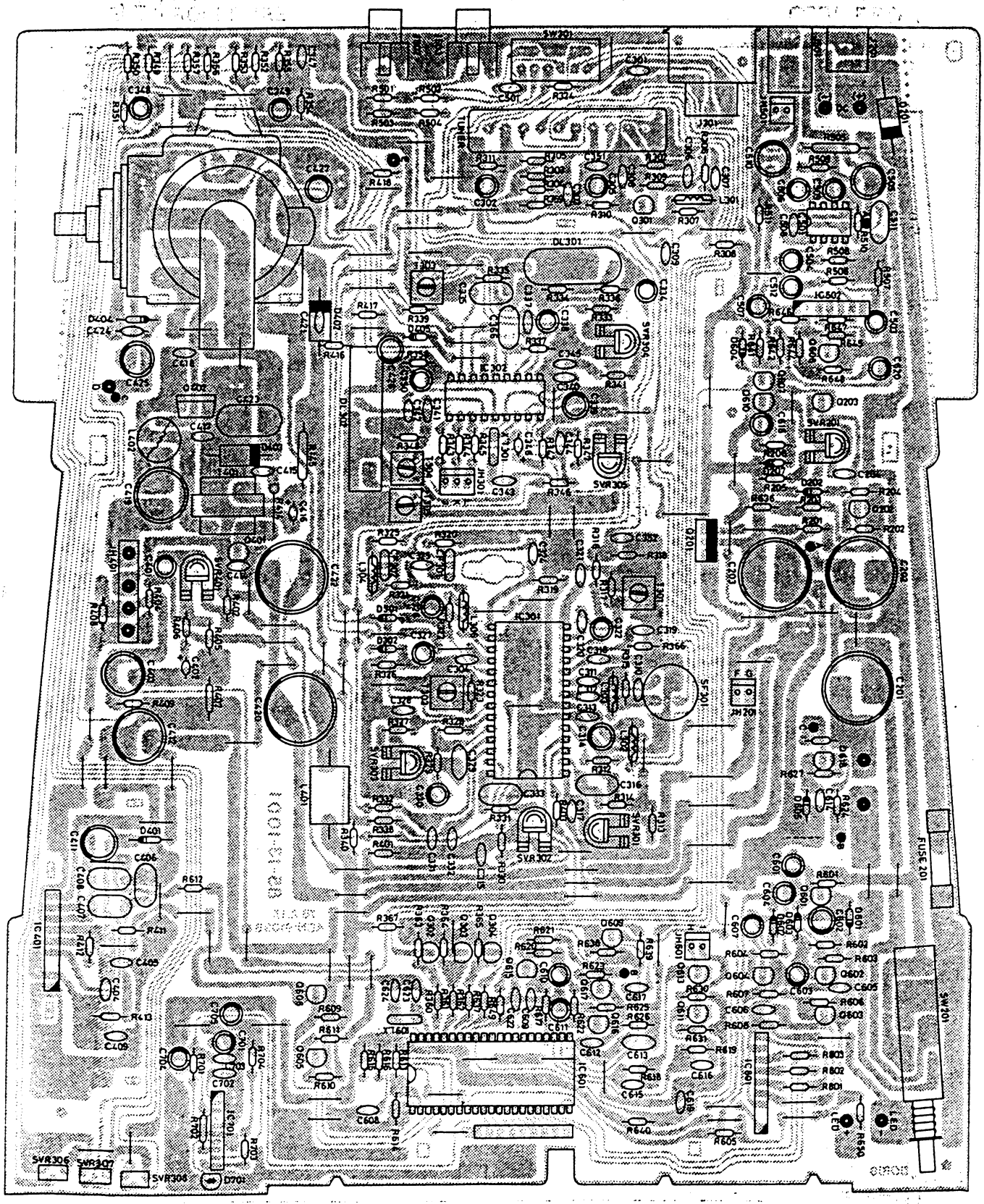
(2) Adjust V-SIZE CONTROL SVR401
When the inside of the largest circle of test pattern reaches near round pattern. (See the figure)



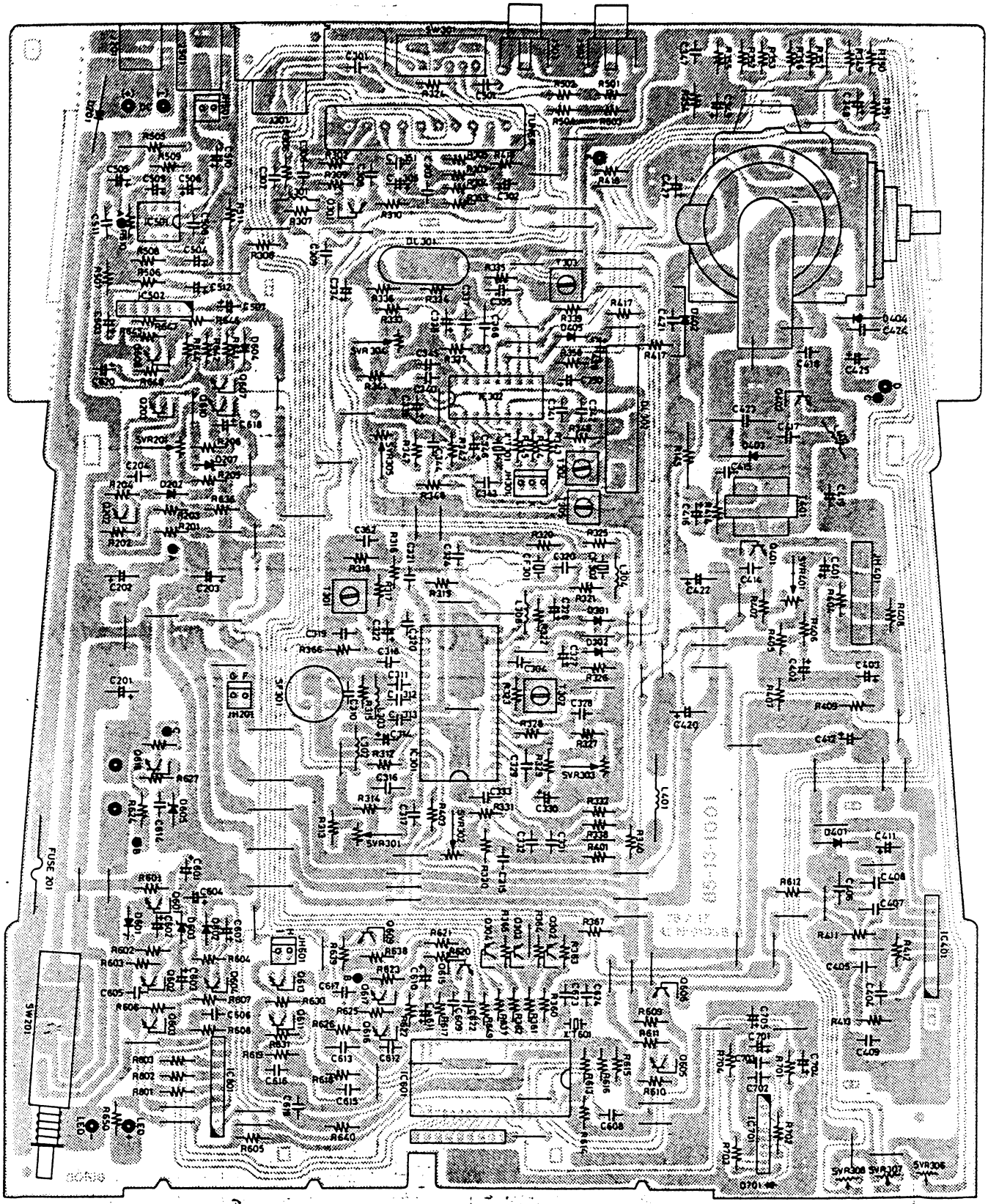
CHASSIS ALIGNT POINTS OF CTV 550/CTV 550(I)



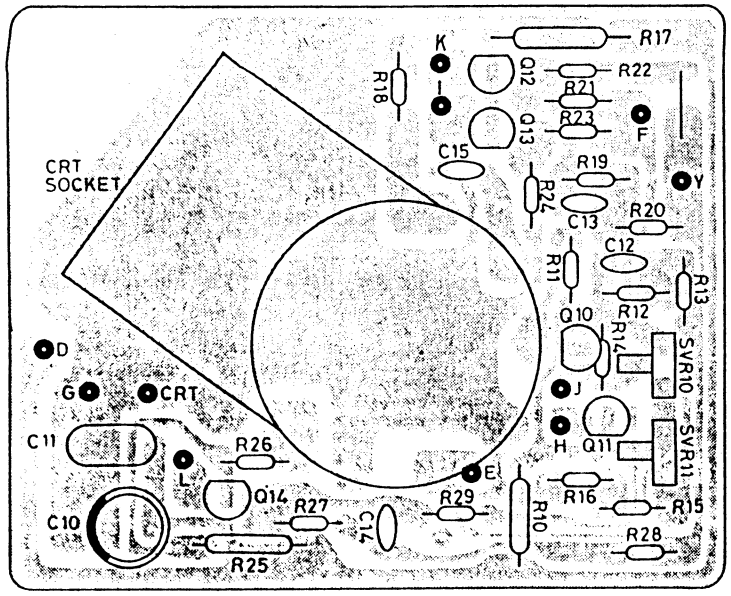
TV P.C.B BOTTOM VIEW OF CTV 550/CTV 550(I)



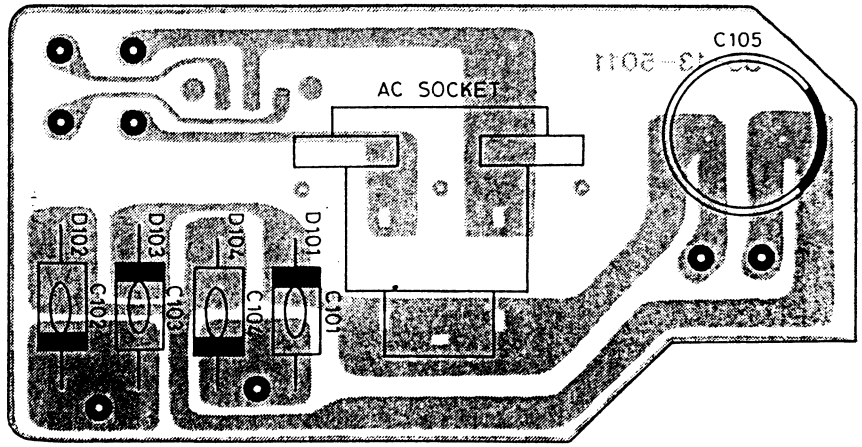
TV P.C.B TOP VIEW OF CTV550/CTV 550(I)



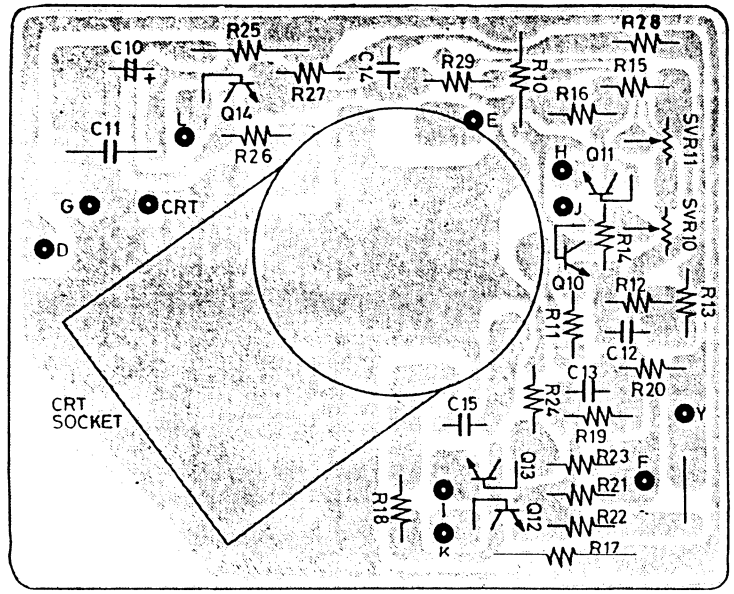
CRT SOCKET P.C.B TOP VIEW OF CTV 550/CTV 550(Ⅰ)



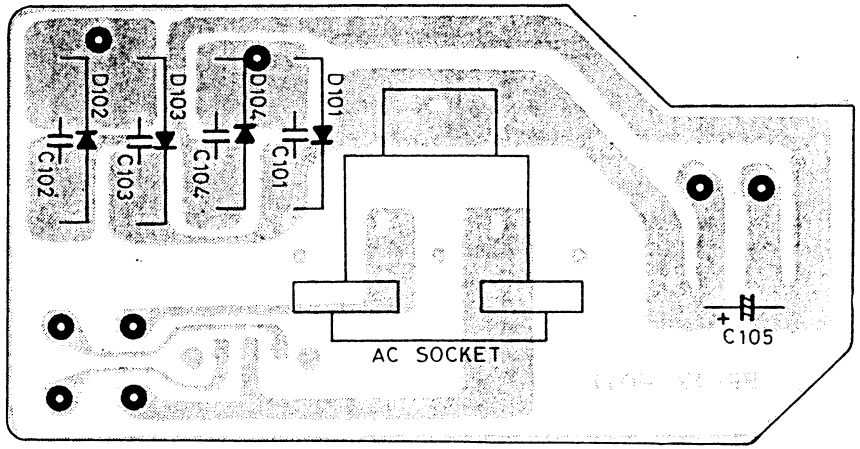
POWER P.C.B TOP VIEW OF CTV 550/CTV 550(Ⅰ)



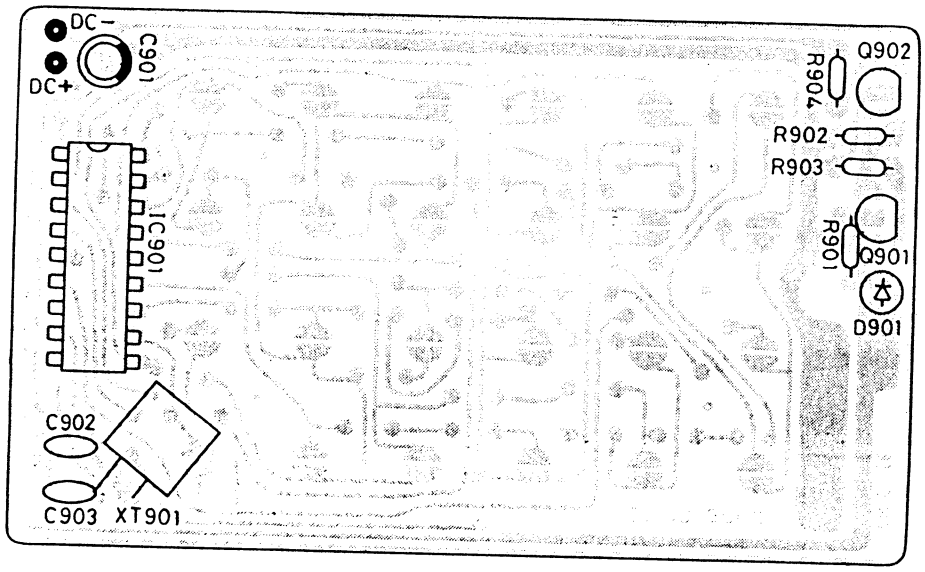
CRT SOCKET P.C.B BOTTOM VIEW OF CTV 550/CTV 550(Ⅰ)



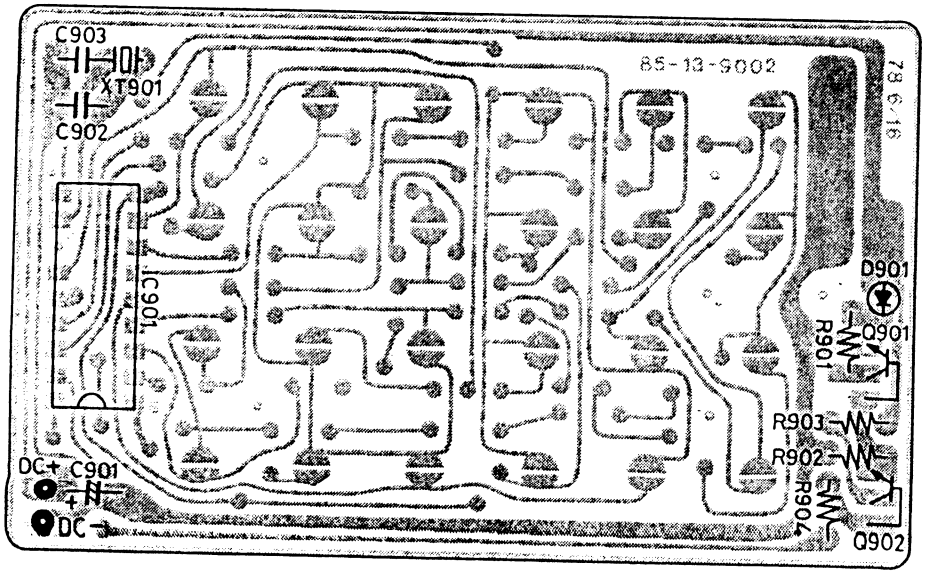
POWER P.C.B BOTTOM VIEW OF CTV 550/CTV 550(Ⅰ)



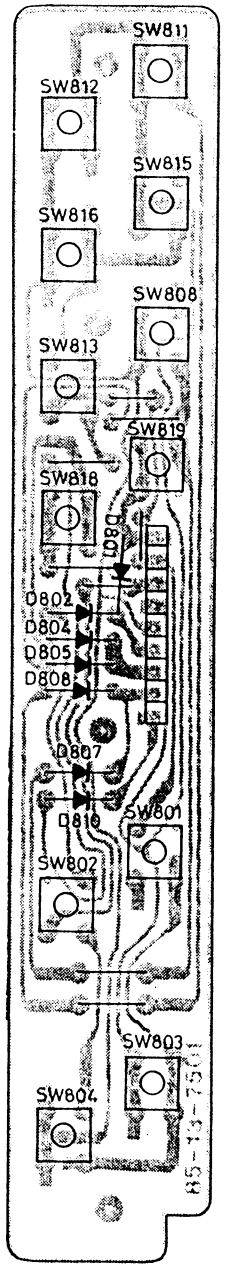
REMOTE CONTROL P.C.B TOP VIEW OF CTV 550/CTV 550(I)



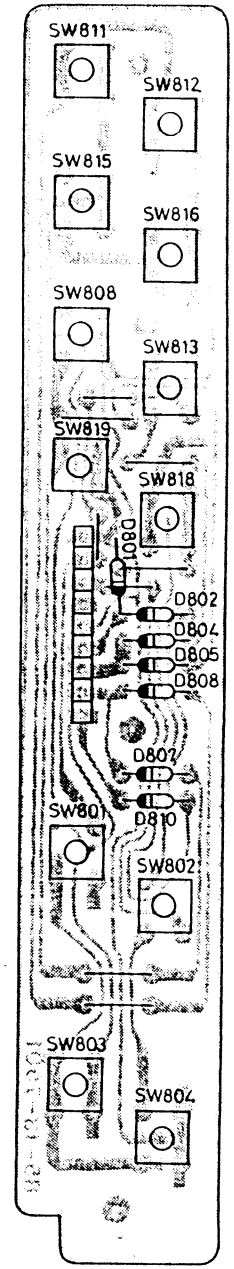
REMOTE CONTROL P.C.B BOTTOM VIEW OF CTV 550/CTV 550(I)



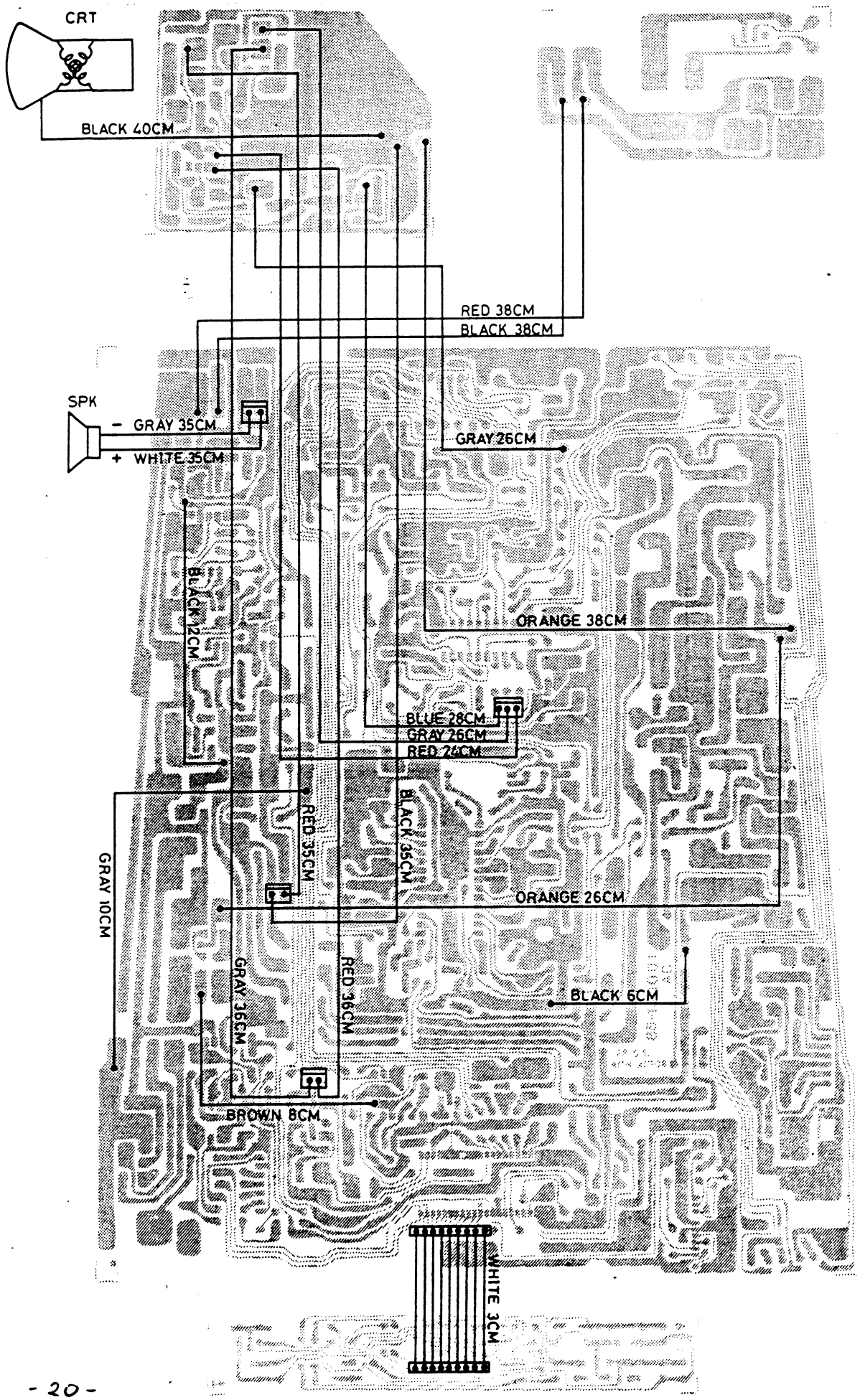
TACT SW P.C.B BOTTOM VIEW OF CTV 550/CTV 550(I)



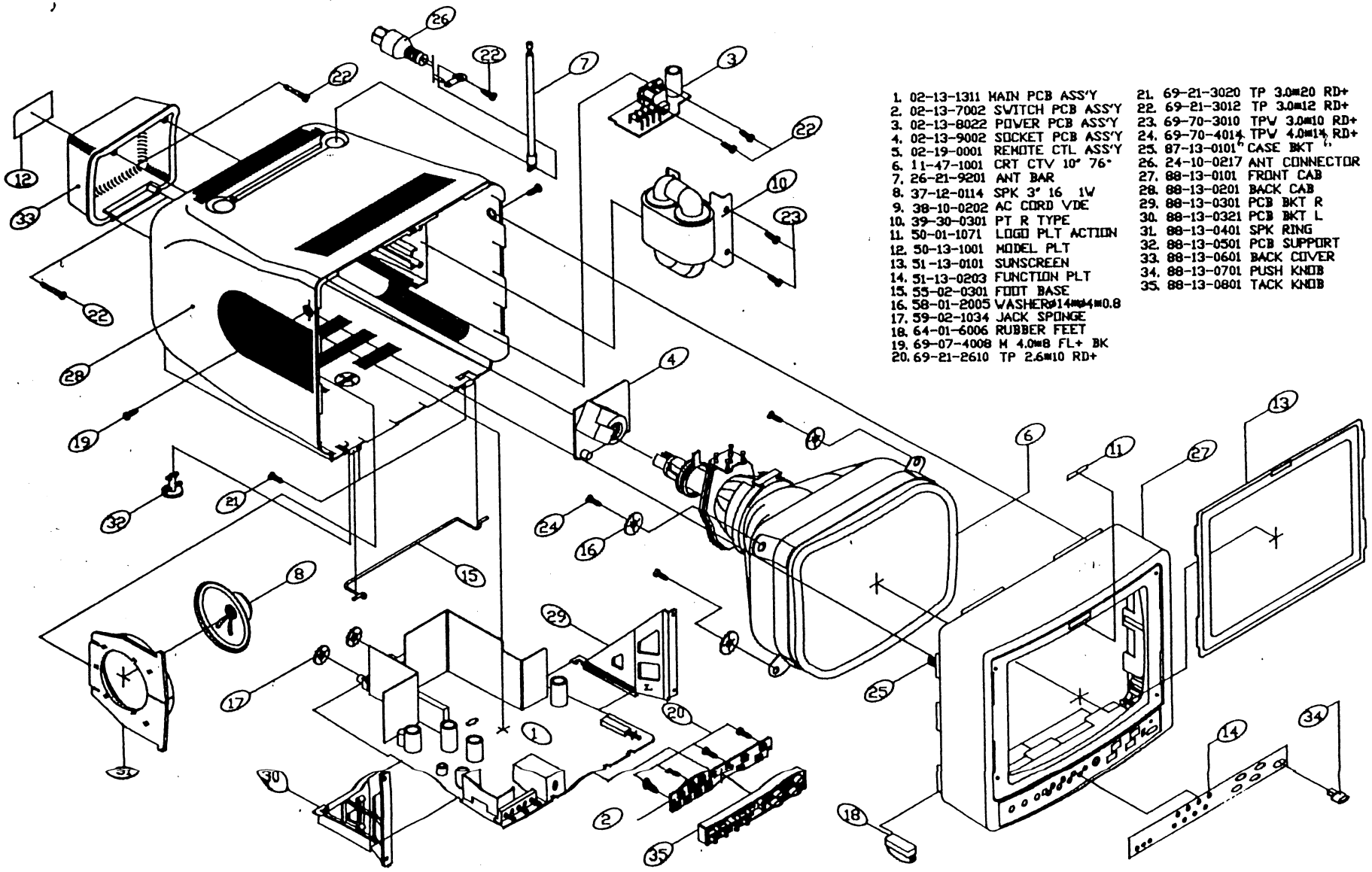
TACT SW P.C.B TOP VIEW OF CTV 550/CTV 550(I)



WIRING DIAGRAM OF CTV 550/CTV 550(I)



EXPLODE VIEW OF CTV 550/CTV 550(I)



1.	02-13-1311 MAIN PCB ASS'Y	21.	69-21-3020 TP 3.0*20 RD+
2.	02-13-7002 SWITCH PCB ASS'Y	22.	69-21-3012 TP 3.0*12 RD+
3.	02-13-8022 POWER PCB ASS'Y	23.	69-70-3010 TPV 3.0*10 RD+
4.	02-13-9002 SOCKET PCB ASS'Y	24.	69-70-4014 TPV 4.0*14 RD+
5.	02-19-0001 REMOTE CTL ASS'Y	25.	87-13-0101 CASE BKT
6.	11-47-1001 CRT CTV 10" 76°	26.	24-10-0217 ANT CONNECTOR
7.	26-21-9201 ANT BAR	27.	88-13-0101 FRONT CAB
8.	37-12-0114 SPK 3" 16 1W	28.	88-13-0201 BACK CAB
9.	38-10-0202 AC CORD VDE	29.	88-13-0301 PCB BKT R
10.	39-30-0301 PT R TYPE	30.	88-13-0321 PCB BKT L
11.	50-01-1071 LOGO PLT ACTION	31.	88-13-0401 SPK RING
12.	50-13-1001 MODEL PLT	32.	88-13-0501 PCB SUPPORT
13.	51-13-0101 SUNSCREEN	33.	88-13-0601 BACK COVER
14.	51-13-0203 FUNCTION PLT	34.	88-13-0701 PUSH KNOB
15.	55-02-0301 FOOT BASE	35.	88-13-0801 TACK KNOB
16.	58-01-2005 WASHERϕ14*ϕ4*0.8		
17.	59-02-1034 JACK SPONGE		
18.	64-01-6006 RUBBER FEET		
19.	69-07-4008 M 4.0*8 FL+ BK		
20.	69-21-2610 TP 2.6*10 RD+		

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
P.C.B.			
85-13-1001	MAIN P.C.B. (BLANK)		1
SEMICONDUCTORS			
10-04-1001	IC TBA820M	IC501	1
10-11-1004	IC MN12C25	IC801	1
10-20-0103	IC AN5512	IC401	1
10-20-0104	IC TDA4505	IC301	1
10-20-0105	IC TDA3565	IC302	1
10-20-1001	IC MN15245	IC601	1
10-20-1002	IC AN5026	IC701	1
10-20-1003	IC AN5262	IC502	1
12-01-1002	TRANSISTOR 5417F	Q301	1
12-02-1003	TRANSISTOR KSC945CL	Q203,602,604,605,606,607 608,609,610,615,617,619	
12-02-2012	TRANSISTOR 9015D	Q302,303,304,616	4
12-03-1041	TRANSISTOR HIT8050C	Q601	1
12-03-1047	TRANSISTOR C2310/2229	Q611,613,618	3
12-03-2031	TRANSISTOR 8550C	Q202,603	2
12-03-2033	TRANSISTOR 2SA1012	Q201	1
12-04-1002	TRANSISTOR D788CD/C2500	Q401	1
12-04-1013	TRANSISTOR BU407	Q402	1
12-05-5009	X'TAL 8.86MHz	XT301	1
12-05-5012	X'TAL 4.0MHz	XT601	1
13-03-1000	DIODE IN4148	D202,301,302,405,601,602 604	7
13-05-1000	DIODE IN4003(4001)	D401	1
13-05-1008	DIODE PR1005	D404	1
13-05-1011	DIODE PR3005 3A	D402,403	2
13-05-1014	DIODE IN5821 3A	D201	1
13-06-1330	DIODE ZENER 33V	D605	1
13-06-1569	DIODE ZENER 5.6V	D603	1
13-06-1689	DIODE ZENER 6.8V	D207,206	2
29-53-4601	DIODE PN 323B	D701	1
RESISTORS			
16-23-1683	CARBON FILM 68K	R349	1
16-01-1100	CARBON FILM 100HM 1/2W	R505	1
16-01-1470	CARBON FILM 47 OHM 1/2W	R415	1
16-03-1124	CARBON FILM 120K 1/8W	R356	1
16-03-1222	CARBON FILM 2.2K 1/8W	R646	1
16-03-1270	CARBON FILM 27 OHM	R702	1
16-03-1333	CARBON FILM 33K 1/8W	R327	1
16-03-1391	CARBON FILM 390 OHM	R346	1
16-03-1394	CARBON FILM 390K 1/8W	R ,337	1
16-03-1822	CARBON FILM 8.2K 1/8W	R351	1

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-03-1912	CARBON FILM 9.1K 1/8W	R401	1
16-12-1229	CARBON FILM 2.2 OHM 1/4W	R414	1
16-12-1330	CARBON FILM 33 OHM 1/4W	R201,203	2
16-12-1479	CARBON FILM 4.7 OHM 1/4W	R407,418	2
16-23-1101	CARBON FILM 100 OHM	R308,312,338	3
16-23-1102	CARBON FILM 1K	R ,206,313,329,334,335, 336,342,347,408,504,630, 631,637,650	14
16-23-1103	CARBON FILM 10K	R202,309,316, ,358, 360,361,362,363,364, 365,366,417,507,610, 611,612,613,609,614, 626,636,638,639,641, 642,647,701	27
16-23-1124	CARBON FILM 120K	R352	1
16-23-1104	CARBON FILM 100K	R412,416,511,623	4
16-23-1105	CARBON FILM 1M	R341	1
16-23-1109	CARBON FILM 1 OHM	R510	1
16-23-1122	CARBON FILM 1.2K	R601	1
16-23-1123	CARBON FILM 12K	R605,606	2
16-23-1152	CARBON FILM 1.5K	R624,649	2
16-23-1153	CARBON FILM 15K	R648	1
16-23-1181	CARBON FILM 180 OHM	R304,325	2
16-23-1183	CARBON FILM 18K	R355	1
16-23-1184	CARBON FILM 180K	R326	1
16-23-1221	CARBON FILM 220 OHM	R405,508	2
16-23-1222	CARBON FILM 2.2K	R411,413,608	3
16-23-1223	CARBON FILM 22K	R ,305,339,354 , 404,617,625	6
16-23-1224	CARBON FILM 220K	R703	1
16-23-1271	CARBON FILM 270 OHM	R307	1
16-23-1273	CARBON FILM 27K	R353	1
16-23-1330	CARBON FILM 33 OHM	R402	1
16-23-1331	CARBON FILM 330 OHM	R321,343,344,345	4
16-23-1332	CARBON FILM 3.3K	R317, ,406	2
16-23-1333	CARBON FILM 33K	R331,618,619,620,621, 622,704	7
16-23-1334	CARBON FILM 330K	R322	1
16-23-1390	CARBON FILM 39 OHM	R367	1
16-23-1392	CARBON FILM 3.9K	R403,506	2
16-23-1471	CARBON FILM 470 OHM	R324,348	2
16-23-1472	CARBON FILM 4.7K	R306,318,801,802,803	5

PARTS LIST
MAIN P.C.B. ASSEMBLY

CTV 550
CTV 550(I)

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-23-1473	CARBON FILM 47K	R204,311,330, ,350, 357,615,616,640,607, 604,627,645	12
16-23-1474	CARBON FILM 470K	R319,303,359	3
16-23-1561	CARBON FILM 560 OHM	R333,602	2
16-23-1562	CARBON FILM 5.6K	R603,644	2
16-23-1680	CARBON FILM 68 OHM	R509	1
16-23-1681	CARBON FILM 680 OHM	R310,320,503	3
16-23-1682	CARBON FILM 6.8K	R340,	1
16-23-1750	CARBON FILM 75 OHM	R302,501,502	3
16-23-1821	CARBON FILM 820 OHM	R409,323,332	3
16-23-1823	CARBON FILM 82K	R328,353	2
16-23-1824	CARBON FILM 820K	R314	1
16-42-7303	CARBON FILM 30K	R327	1
16-03-1104	CARBON FILM 100K	R369	1
16-01-1101	CARBON FILM 100 OHM	R207	1
16-12-1471	CARBON FILM 470 OHM	R208	1
16-03-1682	CARBON FILM 6.8K	R651	1
16-03-1103	CARBON FILM 10K	R653	1
16-03-1563	CARBON FILM 56K	R652	1
16-03-1153	CARBON FILM 15K	R368	1
CAPACITORS			
17-05-2100	ELECTROLYTIC 10u/50V	C419	1
17-15-4104	CERAMIC .1u	C347	1
17-15-4203	CERAMIC .02u	C313	1
17-15-4403	CERAMIC .04u	C352	1
17-18-4152	CERAMIC .0015u/500V	C418,421,424	3
17-21-3471	ELECTROLYTIC 470u/10V	C602	1
17-22-3102	ELECTROLYTIC 1000u/16V	C403	1
17-22-3222	ELECTROLYTIC 2200u/16V	C420	1
17-23-3100	ELECTROLYTIC 10u/25V	C701	1
17-23-3101	ELECTROLYTIC 100u/25V	C411	1
17-23-3102	ELECTROLYTIC 1000u/25V	C412	1
17-23-3109	ELECTROLYTIC 1u/25V	C704	1
17-23-3222	ELECTROLYTIC 2200u/25V	C201,202,203,422	4
17-23-3228	ELECTROLYTIC .22u/25V	C610	1
17-26-3229	ELECTROLYTIC 2.2u/160V	C426,427	2
17-26-3479	ELECTROLYTIC 4.7u/160V	C425	1
17-35-2104	MYLAR .1u	C335,406,407,408,417, 511,613	7
17-35-2154	MYLAR .15u	C333	1
17-35-2224	MYLAR .22u	C316	1
17-45-2272	PSC 2700P	C328	1

PARTS LIST
MAIN P.C.B. ASSEMBLY

CTV 550
CTV 550(I)

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
CAPACITORS			
17-35-2683	MYLAR .068u	C329	1
17-37-2334	MYLAR .33u/250V	C366	1
17-52-2109	TANTALUM 1u/16V	C346,402	2
17-52-2229	TANTALUM 2.2u/16V	C416	1
17-67-2683	PC .068u/250V	C423	1
27-15-1101	CERAMIC 100P	C204,508,609,622,623, 624	6
27-15-1120	CERAMIC 12P	C343	1
27-15-1151	CERAMIC 150P	C331	1
27-15-1680	CERAMIC 68P	C325	1
27-15-2271	CERAMIC 270P	C341,342	2
27-15-2331	CERAMIC 330P	C702	1
27-15-2471	CERAMIC 470P	C404,619	2
27-15-4102	CERAMIC .001uF	C311,312,608,615,616	5
27-15-4103	CERAMIC .01u	C301,306,307,308,309, 501,605,606	8
27-15-4202	CERAMIC .002u	C703	1
27-15-4203	CERAMIC .02u	C303,304,318,319,320, 321,324,340,351,414, 614,617	12
27-22-3101	ELECTROLYTIC 100u/16V	C314,339	2
27-22-3221	ELECTROLYTIC 220u/16V	C505,510	2
27-22-3470	ELECTROLYTIC 47u/16V	C302,305,504,506,509, 618	6
27-23-3100	ELECTROLYTIC 10u/25V	C330,401,512,601,603, 604,607	7
27-23-3109	ELECTROLYTIC 1u/25V	C322,326,327,503,507	5
27-23-3228	ELECTROLYTIC .22u/25V	C611	1
27-23-3229	ELECTROLYTIC 2.2u/25V	C350,620,621,334	4
27-35-2473	MYLAR .047u	C473	1
27-23-3479	ELECTROLYTIC 4.7u/25V	C338,348,349	3
27-35-2102	MYLAR .001u/50V	C332	1
27-35-2103	MYLAR .01u	C337,344,612	3
27-35-2223	MYLAR .022u	C317,345, ,409	3
27-35-2333	MYLAR .033u	C415	1
27-35-2472	MYLAR .0047u	C315	1
IFTS & COILS			
18-03-3001	CERAMIC FILTER SIF 5.5MHz	CF301	1
18-03-3002	CERAMIC FILTER SIF TRAP	CF302	1
18-03-5001	CERAMIC FILTER VIF CTV	SF301	1
18-03-7002	IFT SIF 5.5MHz	T301	1
18-03-7003	IFT CTV 4.43MHz	T303	1
18-03-7004	IFT CTV 10uH	T304,305	2

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
IFTS & COILS			
18-03-7005	IFT VIF DET38.9MHz	T302	1
19-40-2150	CHOKE 15uH	L304	1
19-40-2151	CHOKE 150uH	L401	1
19-40-2159	CHOKE 1.5uH	L301	1
19-40-2689	CHOKE 6.8uH	L306	1
19-40-2828	CHOKE .82uH	L303	1
19-40-3101	CHOKE 100uH	L302	1
19-43-2150	CHOKE 15uH	L402	1
19-45-3391	DELAY LINE 330NS	DL301	1
19-45-6401	DELAY LINE 64US	DL302	1
MISCELLANEOUS			
15-03-0250	TUNER	TUNER	1
21-72-1020	SVR 1KB 8DH	SVR305	1
21-72-1031	SVR 10KB 8DH	SVR304	1
21-72-1032	SVR 10KB	SVR306,307,308	3
21-72-2021	SVR 2KB 8DH	SVR201	1
21-72-2031	SVR 20KB 8DH	SVR301	1
21-72-3010	SVR 300B 8DH	SVR401	1
21-72-5020	SVR 5KB 8DH	SVR303	1
21-72-5031	SVR 50KB 8DH	SVR302	1
22-12-0416	SWITCH SLIDE 4P2T	SW301	1
22-42-0404	SWITCH PUSH 4P2T	SW201	1
23-02-0006	COAXIAL SOCKET	J301	1
23-03-3502	JACK MIC 3.5D	J501	1
23-05-4501	JACK DC 4.5D	J201	1
23-06-0004	JACK RCA R-ANGE	J502	1
23-06-0010	JACK RCA R-ANGE	J503	1
24-21-2001	PIN 2P STRAIGHT	JH201,501,601	3
24-21-3001	PIN 3P STRAIGHT	JH301	1
24-41-4001	WAFER 4P 1.57D	JH401	1
24-51-1002	PIN 1P 1.5D		2
25-23-5021	FUSE 5A	FS201	1
39-16-0001	XFM H-DRIVE		1
43-73-1001	FLYBACK TRANSFORMER		1
57-03-0001	BUSHING		2
65-01-1202	RIVET 2Dx4		4
69-01-3008	SCREW ISO 3x8		3
69-21-2306	SCREW TAPPING 2.3x6		2
70-01-3056	NUT ISO M3		3
87-13-0501	POWER HEAT SINK		1
87-13-0601	HORIZONTAL HEAT SINK		1
87-13-0701	HEAT SINK		2
87-13-0901	SENSOR COVER		1
87-13-1001	SENSOR COVER		1
87-87-0301	VERTICAL HEAT SINK		1

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
MISCELLANEOUS			
13-05-1003	DIODE 1N5400	D101,102,103,104	4
17-15-4103	CERAMIC CAPACITOR .01u	C101,102,103,104	4
17-23-3472	ELECTROLYTIC CAPACITOR 4700u/25V	C105	1
23-04-1316	SOCKET AC VDE		1
24-50-1010	HOUSING 1P		1
24-50-1011	HOUSING 1P		1
65-01-1202	RIVET 2Dx4		4

TACK SWITCH P.C.B. ASSEMBLY

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
MISCELLANEOUS			
13-03-1000	DIODE 1N4148	D801,802,804,805,807,808,810	7
22-82-0212	TACK SWITCH	SW801,802,803,804,808,811,812,813,815,816,818,819	12
24-71-9002	FLAT WIRE 9P		1
85-13-7501	TACK SWITCH P.C.B. (BLANK)		1

CRT SOCKET P.C.B. ASSEMBLY

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
MISCELLANEOUS			
12-03-1047	TRANSISTOR C2310/2229	Q10,11,12,13,14	5
16-01-1223	RESISTOR 22K 1/2W	R10,17,25	3
16-03-1122	RESISTOR 1.2K 1/8W	R16,24	2
16-03-1151	RESISTOR 150 OHM 1/8W	R13,20,28	3
16-03-1222	RESISTOR 2.2K 1/8W	R11,18,26	3
16-03-1272	RESISTOR 2.7K 1/8W	R15,23	2
16-03-1472	RESISTOR 4.7K 1/8W	R14,29	2
16-03-1562	RESISTOR 5.6K 1/8W	R22	1
16-03-1821	RESISTOR 820 OHM	R12,19,27	3
16-03-1822	RESISTOR 8.2K 1/8W	R21	1
17-15-2471	CERAMIC CAPACITOR 470P	C12,13,14	3
17-18-4152	CERAMIC CAPACITOR .0015u/500V	C15	1
17-37-2334	MYLAR CAPACITOR .33u/250V	C11	1
21-72-5021	SVR 5KB 8DV		2
23-08-0905	SOCKET CRT		1
24-20-2011	HOUSING 2P		1
24-20-2030	HOUSING 2P		1
24-20-3011	HOUSING 3P		1
85-13-5001	CRT SOCKET P.C.B. (BLANK)		1

PARTS LIST
REMOTE CONTROL P.C.B. ASSEMBLY

CTV 550
CTV 550(I)

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
P.C.B.			
85-13-9001	REMOTE CONTROL P.C.B. (BLANK)		1
SEMICONDUCTORS			
10-20-1004	IC MN6014A	IC901	1
12-05-5102	X'TL 455K	XT901	1
12-02-1003	TRANSISTOR C945K	Q902	1
12-03-1041	TRANSISTOR HIT8050C	Q903	1
RESISTORS			
16-03-1109	CARBON FILM 1 OHM	R901	1
16-03-1102	CARBON FILM 1K	R902	1
16-03-1472	CARBON FILM 4.7K	R904	1
16-03-1270	CARBON FILM 27 OHM	R903	1
CAPACITORS			
17-15-1151	CERAMIC 150P	C902,903	2
17-21-3470	ELECTROLYTIC 47u/10V	C901	1
MISCELLANEOUS			
29-53-3001	LED LN66A	D901	1

REMOTE CONTROL FINAL ASSEMBLY

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
MISCELLANEOUS			
24-10-0431	RUBBER PAD		1
51-19-0103	FUNCTION PLATE		1
59-04-2001	ADJ SPONGE		1
69-21-2006	SCREW TAPPING 2x6		2
87-19-0101	BATTERY PLATE		2
87-19-0102	BATTERY PLATE		1
88-19-0101	FRONT CABINET		1
88-19-0201	REAR CABINET		1
88-19-0301	BATTERY CABINET		1

PARTS LIST
FINAL ASSEMBLY

CTV 550
CTV 550(I)

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
MISCELLANEOUS			
11-47-1001	CATHODE RAY TUBE		1
24-10-0203	ANTENNA PAD		1
24-10-0217	ANTENNA CONNECTOR		1
24-10-0100	SOLDERING LUG		1
24-20-2021	HOUSING 2P		1
24-50-1014	HOUSING 1P		1
26-21-9201	ROD ANTENNA		1
37-35-1091	SPEAKER 3" 16 OHM		1
38-10-0202	AC CORD		1
38-93-0203	CAR CORD 5A		1
39-30-0301	POWER TRANSFORMER		1
55-02-8002	NETTING SPRING		1
55-02-0301	FOOT BASE		1
58-01-2016	WASHER 15x5x1		4
59-02-1034	JACK SPONGE		2
64-01-6006	RUBBER FEET		2
METAL PARTS			
69-21-3012	SCREW TAPPING 3x12		6
69-70-3010	SCREW TAPPING 3x10		2
69-07-4008	SCREW ISO M4x8		2
69-21-2610	SCREW TAPPING 2.6x10		4
69-21-3012	SCREW TAPPING 3x12		7
69-21-3020	SCREW TAPPING 3x20		2
69-70-4012	SCREW TPW 4x12		4
87-13-0101	CASE BRACKET		2
87-29-0401	WIRE CLAMPER		1
87-13-0801	TRAN CLAMPER		1
PLASTIC PARTS			
88-13-0101	FRONT CABINET, BLACK		1
88-13-0204	BACK CABINET		1
88-13-0604	BACK COVER		1
88-13-0701	PUSH KNOB		1
88-13-0801	TACK KNOB		1
88-13-0301	PCB BRACKET RIGHT		1
88-13-0321	PCB BRACKET LEFT		1
88-13-0401	SPEAKER RING		1
88-13-0501	PCB SUPPORT		1

PARTS LIST
FINAL ASSEMBLY

CTV 550
CTV 550(I)

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
APPEARANCES			
50-13-1007	MODEL PLATE		1
50-13-2007	FTZ LABEL		1
51-13-0102	SUNSCREEN		1
51-13-0204	FUNCTION PLATE		1
90-13-0001	SERIAL LABEL		1
90-13-0003	HOLE LABEL		1
90-13-0004	PHONE LABEL		1
90-13-0005	DC LABEL		1
91-13-1007	INSTRUCTION BOOK		1
91-78-2438	WARRANT CARD		1
94-13-0007	CARTON		1
96-13-3001	POLYFOAM PACKING		1
96-13-0001	POLYFOAM		1
97-87-0001	PE BAG		1